

US005283674A

United States Patent [19]

Hanaoka et al.

Patent Number: [11]

5,283,674

Date of Patent: [45]

Feb. 1, 1994

[54]	BACKLIGHT APPARATUS HAVING VENTILATING HOLES FOR LIQUID CRYSTAL DISPLAY	
[75]	Inventors:	Shunsuke Hanaoka, Tokyo; Arifumi Etoh; Heihachi Ide, both of Kanagawa, all of Japan
[73]	Assignee:	Sony Corporation, Tokyo, Japan
[21]	Appl. No.:	954,340
[22]	Filed:	Sep. 30, 1992
[30]	Foreign Application Priority Data	
Sep. 30, 1991 [JP] Japan 3-278855		
	Int. Cl. ⁵	
[58]	Field of Search	
[56]	References Cited	

FOREIGN PATENT DOCUMENTS

0420072 4/1991 European Pat. Off. 359/50 0155829 9/1984 Japan 359/50

0208631 8/1990 Japan 359/50 Primary Examiner-William L. Sikes Assistant Examiner-Huy Mai Attorney, Agent, or Firm-Hill, Steadman & Simpson

ABSTRACT

A liquid crystal display apparatus which prevents illumination of light by non-uniform brightness from a fluorescent lamp employed for the backlight illumination which is caused by mercury enclosed in the fluorescent tube being deposited on the inner surface of the tube of the fluorescent lamp. The liquid crystal display apparatus comprises a liquid crystal display panel, a backlight apparatus including a fluorescent lamp disposed on the rear face side of the liquid crystal display panel for directing illuminating backlight upon the liquid crystal display panel, and a reflecting plate disposed remote from the liquid crystal display panel with respect to the fluorescent lamp. The reflecting plate has a plurality of ventilating holes formed at portions of a recessed portion thereof opposing to an outer periphery of the fluorescent lamp.

4 Claims, 2 Drawing Sheets

